# NETFL@RUSA<sup>®</sup>

# ECO series Low Profile Cable Management Access Floor System



Office renovation project site



LEED Compliance Maximize your LEED Credit Point



ECO mark regisered



# CA600R CA500R CA400R



A manufacturing office, Southeast USA

**NetfloorUSA ECO** is one of the hottest selling products among NetfloorUSA product family. The system has been widely used for new buildings as well as for renovation and upgrading in many commercial and public institution interiors such as offices, schools, call centers, libraries training classrooms and retail stores.

Since its launch in 1996, millions of square feet of the ECO series have been installed in many areas around the globe including the USA, U.K, Europe, Middle East, Asia, Australia, Brazil, and Chile.

The ECO Series, with its unique cable management capability of low height, duarability, and environmental friendliness is popular in the world market. In the rapidly evolving internet and e-commerce age, the ECO series is a perfect fit in nearly any application.



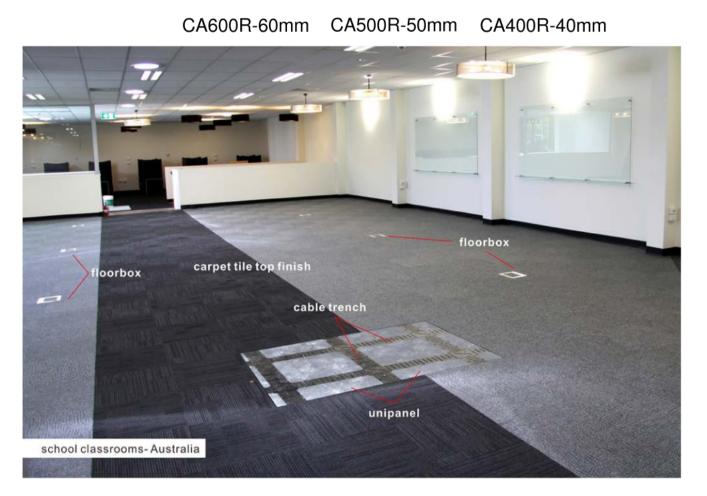


Even high-end spaces, like a museum, can use NetfloorUSA ECO



An airline reservation center uses NetfloorUSA for a reconfigurable call center.

# Low-Profile High Capability







#### The Unique Grid-Pattern Cable Trench System

**Cable Trenches:** are formed automatically when installing and connecting Base Connectors to Unipanels.

Width of Cable Trench: 90 mm width cable trenches surrounding every 600 X 600 mm module, form a grid-pattern that facilitates future moves, additions and changes.

High cable management capacity at low-height System heights: 40 mm, 50 mm, 60mm. Cable Trench clearance: system height minus 5 mm. Cables can be routed systematically through the cable trenches, and cavities under the Unipanels providing reserve space for extra distribution.

**Free cable extension:** Cables extend from cable trenches to connect with service floor boxes, or extend through grommets to connect data and power sockets at partition wall bases, conference table, or workstation desktop locations.

# Rapid Deployment

# High Changeability



# Besides providing systematic and high cable carrying capacity, the system provides high changeability where cable rerouting and relocation is expected frequently

- 1. Systems installed without adhesives to the sub floors.
- 2. At the time of re-location, no damage to sub-floor.
- 3. Cable routing and re-routing is efficient, neat, and with little interference to surrounding workstations.
- 4. In most cases, overnight cable re-distribution is possible, without interfering with normal business and customer operations.
- 5. Minimal costs are incurred during re-layout or re-location.



# **Environmental Friendly**

The ECO series with its emphasis on being environmentally friendly meets the high standard of Green building materials. The UniPanel (main panel) is made of recycled poly-propylene. All of the main components of ECO series including UniPanel, Base Connector, Cable Trench steel caps are 100% reusable and recyclable.

recycled poly-propylene



Using the ECO series for projects can maximize your LEED credit point for both new buildings and old building renovations.

UniPanel (main panel): Is made of recycled poly-propylene.

**100% re-usable:** All components are 100% re-usable.

**100% recyclable:** All components of the system are 100% recyclable.



relocation & reuse

new product

pre and post consumer content

new installation

### Relocation - 100% re-usable

This telecommunications office has used the ECO series for 10 years before redeploying the floor in a new location.



Pack the cable trench steel caps



Unipanels and steel caps were packed



Quickly and efficiently moved out



Transported to the re-located site

LEED (The Leadership in Energy and Environmental Design) is globally recognized certification program for the design, construction, and operation of environment effeciencybuildings. Netfloor ECo series access flor systems meets and surpass the LEEDCredit Point standads.

W TO

| LEED Credit                            |                                                                                                                                                                                                                          |                                                                                                                                                                                                     | LEED Ppints<br>for Your Project |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Materials &<br>Resources<br>Credit 4.2 | Use materials with recycled content total of 20%, based on cost of the total value of the materials in the project                                                                                                       | ECO series CA600R,<br>CA500R, CA400R recycled<br>contents are greater than<br>60% of total system<br>material                                                                                       | Contributes to <b>2 points</b>  |
| Environment<br>Quality Credit<br>4.1   | Low-Emitting Materials:<br>Adhesives & Sealants.<br>Reduce the quantity of<br>indoor air contaminants that<br>are odorous, irritating<br>and/or harmfull to the<br>comfort and well-being of<br>installers and occupants | NetfloorUSA ECO series is<br>designed to install without<br>adhesive on the<br>sub-floors, unlike traditional<br>access floor systems which<br>requires adhesives to be<br>applied to the sub-floor | Contributes to <b>1 points</b>  |



User Friendly 100% Reusable 100% Recyclable

LEED Compliance Maximize your LEED Credit Point



NO. 5556

# 100% Recyclable - 100% Recyclable - 100% Recyclable



Recycle from job site

Crushing and Processing Crushed Poly-propylene

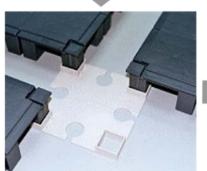
Packed and prepared for resin re-manufacturing

# Simplicity

#### Interlocking configuration, low labor costs

The system consists of 4 main components: UniPanel (main panel), Base Connector, Central Cap, and Flank Cap. During installation, UniPanels are connected by Base Connectors, which automatically form 90 mm wide, grid-pattern Cable Trenches. Steel Cable Trench Caps (Central Cap and Flank Cap) are easily installed, by hand, to cover the Cable Trenches. The Cable Trench Caps are designed to seat firmly on the UniPanel, and protect cables running inside the Cable Trenches that can be easily removed for complete accessibility. All main components: UniPanel, Cable Trench Cap, Base Connector are interchangeable.

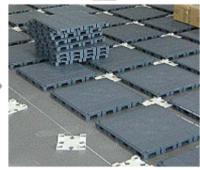




4-way base Connector to connect corner pedestals of the UniPanel to automatically form grid-pattern of Cable Trenches



Central Cap and Flank Cap are fully accessible, and inter-changeable. Users can lift the caps easily without using special tools



Continuous interlocking process to lay UniPanels on the floor. It follows the floor contour with no leveling required

#### Benefits

### Retain maximum ceiling height

The ECO series comes in 3 fixed heights at 40 mm, 50 mm, and 60 mm. The unique grid-pattern cable trench system is superb at providing high capacity for cables running inside the trenches, while maintaining the low-profile heights.

|         | System Height | Cable Trench<br>Width | Cable Trench<br>Clearance |
|---------|---------------|-----------------------|---------------------------|
| CA-600R | 60 mm (2.36") | 90 mm (3.54")         | 55 mm (2.16")             |
| CA-500R | 50 mm (1.97") | 90 mm (3.54")         | 45 mm (1.77")             |
| CA-400R | 40 mm (1.57") | 90 mm (3.54")         | 35 mm (1.37")             |



Walls, partitions and fixtures can be built directly on top of the floor system without interrupting the cables under the floor.

### Quick Installation, Less Interference

Installation is quick and easy, whether performed by a NetfloorUSA or in-house installers. If renovating, installation may be done room by room or area by area to minimize interference in normal office operation. Full height dry wall or de-mountable partition can be erected on top of the system without interrupting cable distribution.

#### Cost Effective

**Labor saving:** only 1/2 - 2/3 the installation time compared to conventional raised floor. One installer can complete 70 to 90 sq. meters (750 - 950 SF) per working day.

Low initial cost: Save an average of 2/3 material and labor costs when comparing to traditional raised access floor.

Low maintenance costs: Maintenance costs of the ECO series are almost nonexistent

#### 100 % reusable

In case of renovation or re-location, all main components, with the exception of the sound attenuation blanket, can be easily removed, and are 100 % reusable.

#### **User Friendly**

#### Accessibility

Cables are free to extend and connect to open office low partitions, full partitions, workstations, and desktops, just by replacing the Flank Cap with Exit-Cap (Flank Cap with 60 mm diameter opening). Lifting and replacing of Trench Caps are very easy, either by hand and/or screw driver, without needing special tools or a call to floor or cabling contractor.



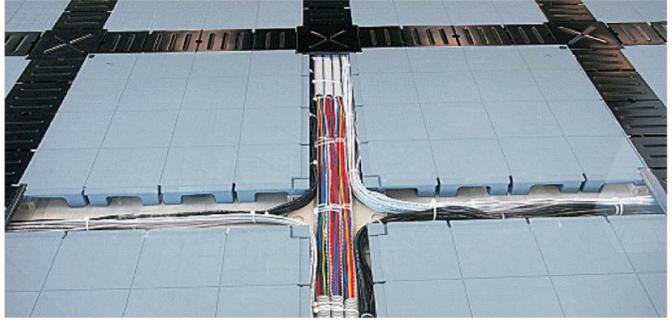
Full height pariition erected on top by fastening floor track onto UniPanel by < 12 mm length wafer-head screw



Half-height partition on ECO series Power, data, voice cables distributing under the floor: efficient and limitless configurations.

## Cable Management & Configurations

Accommodate all types of workstations, half-height / full-height partitions and fixtures



1. Routing cables from any point of Cable Trench to extend through Exit-Cap to extend to partition, wall base, desk top, or workstation.



Cable extend through Exit-Cap and grommet



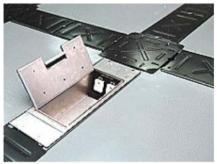
Extension through Exit-Cap to desk top or workstation



Extension through Exit-Cap to full or half height partition

#### 2. Through floor box at any point of Cable Trench

To extend cables connecting to service boxes installed at Cable Trenches by just replacing the Flank Cap.



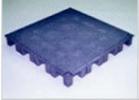




SE603-TW In-Trench Cable Box SE603-BS Alt. Voltage Elec. Box Steel lid topped by carpet

SE603 / SE403 floor box consists of steel mounting lid and galvanized steel base, with 2 power sockets and a face plate for 3 data/voice jacks. Alternate jack configurations available.

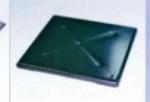
### Main Components



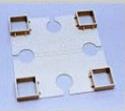
UniPanel (main panel) CA-611R: 60 mm high CA-511R: 50 mm high CA-411R: 40 mm high Size: 510 mm x 510 mm



Flank Cap AD613 Thickness: 2.3 mm Size: 223 mm x 125 mm



Central Cap CA414 Thickness: 2.3 mm Size: 148 X 148 mm



Base Connector CA-415 / AD615 Size: 169 mm X 169 mm



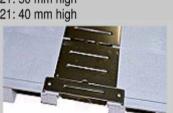
Sound Attenuation Blanket AD-331 2 mm thick PU foam, 1 meter width

#### Accessories and floor boxes





Ramp AD625: 60 mm high AD525: 50 mm high CA425: 40 mm high Free Standing Edge Rail AD621: 60 mm high AD521: 50 mm high CA421: 40 mm high



Starting Cap CA428 for uniform, finished look at the beginning and at the end of cable trench rows



Ramp Threshold Rail AD326



Ramps meet ADA regulations. 1:12 and 1:20 slopes available. Available in straight, angled and curved.



Edge Rail for perimeter installation at residual less than 70 mm, without cutting UniPanel





SE603 H:60mm SE403 H:40mm lid: steel 2 power, and 3 data jacks faceplates



SS603 H:60mm SS403 H:40mm lid: stainless steel 2 power,and 3 data jacks faceplates



SS60 H:60mm box base size: 252 x 220 mm lid: stainless steel 4 power,and 6 data jacks faceplates



Exit-Cap & Grommet AD613D6 & AD-518 Exit-cap is same size as Flank Cap, with 60 mm opening



UniPanel Supporter to support UniPanel regardless of panel cut length when trimming out

### Specifications

ECO series consists of UniPanel (main panel), Base Connector, Central Cap, Flank Cap, Ramp, Sound Attenuation Blanket and all necessary accessories. ECO is suitable for used in general office, command-control, retail buildings and schools, except areas designed for fire escape or lifts.

Module Section: 600 mm x 600 mm (24" x 24")

| System                    | CA-600R                | CA-500R                | CA-400R                |
|---------------------------|------------------------|------------------------|------------------------|
| Height                    | 60 mm (2.36")          | 50 mm (1.97")          | 40 mm (1.57")          |
| Cable Trench<br>width     | 90 mm (3.54")          | 90 mm (3.54")          | 90 mm (3.54")          |
| Cable Trench<br>Clearance | 55 mm (2.16")          | 45 mm (1.77")          | 35 mm (1.37")          |
| System Weight             | 14.5 kg/m <sup>2</sup> | 14.0 kg/m <sup>2</sup> | 13.5 kg/m <sup>2</sup> |

#### Main Components:

UniPanel: made of fire retardant, recycled polypropylene CA611R: size 510 x 510 x 60 mm (20.08" x 20.08" x 2.36") CA511R: size 510 x 510 x 50 mm (20.08" x 20.08" x 1.97") CA411R: size 510 x 510 x 40 mm (20.08" x 20.08" x 1.57") Base Connector:

Size 169 mm X 169 mm X 15 mm (6.65" X 6.65" X 0.59") Made of recycled polycarbonate plus ABS

Central Cap: Size 148 mm X 148 mm (5.82" X 5.82") 2.3 mm (0.09") thick steel, re-enforced ribs corrosion resistance treatment by electro-deposition, black

Flank Cap: Size 223 mm X 119.7 mm (8.78" X 4.71") 2.3 mm (0.09") thick steel, re-enforced ribs corrosion resistance treatment by electro-deposition, black Sound Attenuation Blanket: 2.0 mm (0.08") thickness

#### Accessories

Ramp, Starting Cap, Edge Rail, Alum. Ramp Rail, Alum. Fre Standing, Exit-Cap, Edge Trimmer, etc., to support quick and efficient installation at perimeters

Surface floor covering: on top of ECO series

Commercial carpet tile: such as Milliken, Interface, Burmatex, ...

Commercial rate vinyl tile: thickness > 4.0 mm

Hard floorings such as marble, granite, wood, are not suitable for installation on top of ECO seires system.

# **NETFLOOR USA**

#### Performance

#### **Fire Ratings**

#### UniPanel:

Meet NFPA 253 Class A rating as tested in accordance with ASTM E-648 Critical Radiant Flux. Meets UL 94 V-2

Meet BS 476, Part 7, B2

#### Concentration Load:

Tested in accordance with ASTM-E196 (2" plate) UniPanel CA611R: 400 kg < 2.5 mm depression UniPanel CA511R: 360 kg < 2.5 mm depression UniPanel CA411R: 360 kg < 2.5 mm depression Central Cap: 300 kg < 2.0 mm depression Flank Cap: 300 kg < 2.0 mm depression

#### **Concentration Ultimate Load:**

UniPanel CA611R: >700 kg (1.540 LB) UniPanel CA511R: >600 kg (1.320 LB) UniPanel CA411R: >600 kg (1.320 LB)

#### Uniform Ultimate Load:

UniPanel CA611R: >200 psi UniPanel CA511R: >150 psi UniPanel CA411R: >150 psi

Warranty: 5 years warranty (except when product is subject to abuse, negligence, abnormal use and not is compliance with NetfloorUSA's installation instruction).

In pursuit of quality improvement, the manufacturer reserves the rights to change specifications without prior notice.

#### Patents granted -

USA: Invention Patent No. 5.630.300 Japan: Utility Model No. 3032638 Germany: Utility Model No. 29520105.5 U.K. Invention Patent No. 2309042 Australia: Invention Patent No. 679415 France: Invention Patent No. 97 99 255 China: Utility Model No. ZL 02 2 91689X Taiwan: Invention Patent No. 127700 South Africa: Invention Patent No. 97/020 Patent pending: All other industrial nations



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